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DIP, Split and Tap? 2017 Gibson Les Paul Pickups Explained

Michael Leonard | 10.25.2016

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Gone are the days when a Gibson Les Paul was *only* just two 'buckers, controlled by two Vols and two Tones. On the [2017 range](#) of High Performance Gibson Les Pauls, there's a whole new world of tone at your fingertips, making a modern Les Paul one of the most versatile electric guitars ever made. As always, Gibson gives you plenty of choice.

5 controls, numerous tones

Even at its most complex on HP guitars, Gibson's tone-switching *layout* remains simple. **2 volume knobs** – but they are both **push-pull** and **2 tone knobs** – but again, both **push-pull**.

On selected HP models, there is also the added **DIP switch** (5 on/off sliders) within the body's rear cavity that offers huge further flexibility.

DIP switches 1 and 3 further modify your **neck pickup**.

DIP switches 2 and 4 further modify your **bridge pickup**.

DIP switch 5 further controls **all** output.

The modified options? Let's go!

For the 4 rotary volume and tone controls – in the usual place! – down is traditional humbucker, and up is modified. We assume you're familiar with how sweeping volume and tone controls work on a Gibson in a traditional manner, so let's look at each modified option in turn.



Volume knobs

Neck Volume knob : Pull up to **Tap or Split** the **neck** humbucker.

Tap or Split is determined by DIP Switch 1 location.

DIP 1 off = neck tap.

DIP 1 on = neck split.

Bridge Volume knob : Pull up to **Tap or Split** the **bridge** humbucker.

Tap or Split is determined by DIP Switch 2 location.

DIP 2 off = bridge tap.

DIP 2 on = bridge split.

What Do You Hear? Tap vs Split Explained

Tap = Accesses the pickup coils through a filter. Effectively accents a particular frequency range for a “tuned tap”.

Result = **Fatter, P-90 style** voice with balanced output. Also offers lower noise and hum than true single-coil.

Split = Isolates one coil in the humbucker pair. Effectively changes a humbucker into a single-coil pickup.

Result = Brighter single-coil sound with lower output than humbucking.

NOTE: The pickups are Reverse Wind/Reverse Polarity to retain hum-canceling operation when both pickups are combined.



Tone knobs

Neck Tone knob: Pull up for **Out of Phase** pickups.

Out of phase = reverses the electronic phase of the Neck pickup to be opposite of Bridge pickup. **Result** = when both pickups are combined, a thinner, hollow-type tone with a distinctive mid-range character.

Bridge Tone knob: Pull up for Outer Coils/Down for Inner Coils

This determines which coil is active during coil-splitting and tapping.

Results = The Outer coil of the **bridge pickup** has a **brighter and thinner tone** than the inner coil. The Outer coil of the **neck pickup** will have a **deep and warmer tone** than the inner coil. When both pickups are combined, the **inner coils will have a distinctive mid-range character** while the **outer coils offer more balanced highs and lows**.

Further DIP Switch Functions

DIP Switch 3 is Neck Volume High Pass Filter (Treble Bleed)

DIP 3 off = out of circuit.

DIP 3 on = in circuit.

DIP switch 3 further controls your neck pickup. As a volume control is turned down, high frequencies tend to be attenuated. The resulting sound is darker the volume is lowered due to the interaction of the coil inductance and the volume pot. The High Pass (Treble Bleed) circuit effectively offsets these losses by passing higher frequencies as the volume is lowered.

Result = a cleaner, “crisper” sound at lower volumes

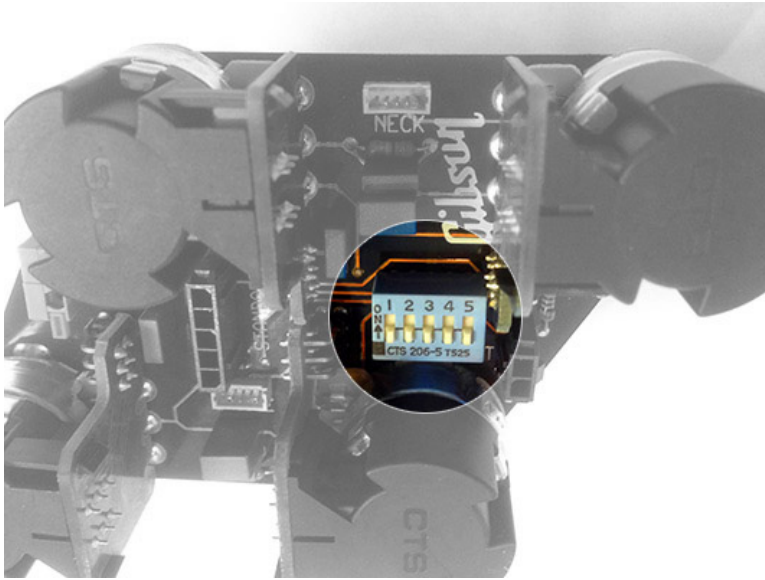
DIP Switch 4 = Bridge Volume High Pass Filter (Treble Bleed)

DIP 4 off = out of circuit.

DIP 4 on = in circuit.

DIP switch 4 further controls your bridge pickup, as above.

Result = a cleaner, "crisper" sound at lower volumes.



DIP Switch 5 = Transient Suppression

5 off = out of circuit.

5 on = in circuit.

DIP switch 5 is a further option for recording. "Transients" = A sudden, loud spike from the initial attack phase of sound, pick attack or "noise" for example. Result = Turning switch 5 on suppresses harsh transient noise or spikes which A/D converters can sometimes pass when recording directly into the high impedance input of a DAW interface or digital mixer. It is virtually transparent when turned on so, bottom line, if you use any digital equipment, flip it on.

Take control of your tone

As you can see, these options massively expand the tonal palette of your Gibson Les Paul. From traditional thick humbucking tone, to fat P-90-style single coils to pure single-coils to out-of-phase and recording options, it's all here. And that's without considering the characteristics of the pickups on each different model, or using the volume/tones in the usual rotary way.

"Chasing sound" was one of Les Paul's favorite phrases to describe his quest for tone, and Les would surely love what a 2017 Gibson Les Paul can do. Right now, you can be the leader in that chase. Here's what's featured on the 2017 Les Pauls.

4 push-pull volume /tones + DIP switch featured on:

2017 Gibson Les Paul Classic HP • 2017 Gibson Les Paul Standard HP • 2017 Gibson Les Paul Traditional HP

2 push-pull volume /tones + DIP switch featured on:

2017 Gibson Les Paul Studio

Push-pull knobs (but NO DIP switch) featured on:

2017 Gibson Les Paul Standard T (push-pull on all 4 volume/control knobs offer coil tapping on both pickups, a pure bypass, and phase reverse) • 2017 Gibson Les Paul Studio T (push-pull tone controls for coil tap)

Traditional volume and tone controls featured on: 2017 Gibson Les Paul Faded HP, Tribute HP and all T models (except noted above)